



MEXICO: The Industrial Robots Market

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Summary

The growing need for efficiency and quality in the manufacturing process, as well as in the supply chain, are driving demand of automated robotic technology. Industrial robots in Mexico were first introduced by the automotive industry, and today, industrial robots can be found in almost every industry. Since 2013, Mexico is the second largest market for U.S. exports with a yearly average demand of almost 4,000 robots.

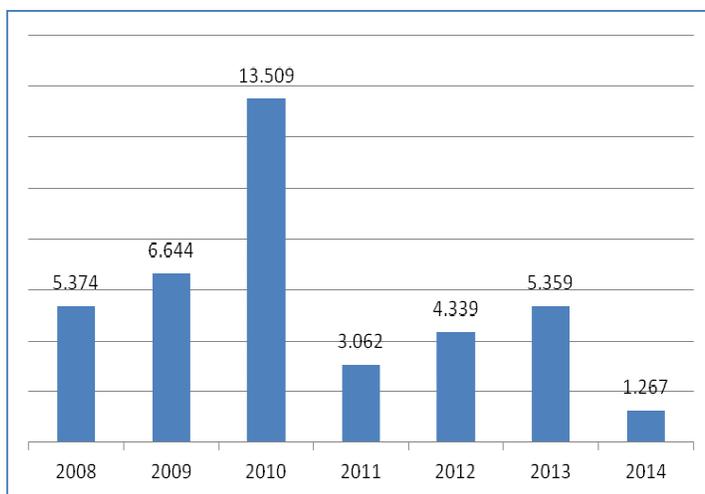


Table 1 - Mexican global imports (Source: Economia)

According to IFR, International Federation of Robotics; Mexico imports of robots has increased at an annual rate of 5.3% since 2010. However, a study from the Mexican Secretariat of Economy shows imports growing at an annual rate of 20% since 2011.

This study refers to industrial robots as defined by ISO 8373; that is, "An automatically controlled, reprogrammable, multipurpose manipulator programmable in three or more axes, which may be either, fixed in place or mobile for use in industrial automation applications."¹ The scope of this category includes Articulated, SCARA, Cartesian and Parallel robots.

Market Demand

Almost half of the industrial robots sold in Mexico are utilized by the automotive industry, followed by the electronic, food & beverage and aerospace industries. In smaller quantities, industrial robots are also sold to the metalworking segment where their use is mostly in material handling to forming, welding and lifting hot metals.

Automotive sector. Experts believe that by 2019, Mexico will increase its automobile production capacity, meaning that Mexico would manufacture one out of every 8 new light vehicles sold in the U. S. In light of that, the automotive sector will continue its growth with a resulting increase in demand for robots and robotic applications.

In 2013 and 2014, several OEMs, from Japan, South Korea, Germany and the U.S., have announced significant investments in new assembly plants. At present, Mexico is the world's fourth largest exporter of autos so these new projects will only increase demand for robotic technology. Specific upcoming investments include: Puebla with Audi and Volkswagen; Nuevo Leon with Daimler-Benz, Navistar and Kia; Sonora with Ford; Coahuila with Fiat (Chrysler); San Luis Potosi with GM; Guanajuato with Honda and Mazda; and Aguascalientes with Nissan.

¹ <http://www.ifr.org/industrial-robots/>

Electronic sector. According to Mexico Today, a Mexican trade analysis organization, eighty percent of the largest electronics OEMs are established in Mexico making the country the second largest supplier of electronic products to the U.S. Large amounts of FDI are flowing every year with over \$20 billion already invested since 2000. The northern region has the largest concentration of electronic manufacturing plants with facilities located in Baja California, Chihuahua and Tamaulipas and includes companies like Jabil, Flextronics and Sanmina SCI and multinational companies such as Samsung, Sony, Pioneer and others.

Food and Beverage. Food and Beverage industries were among the first in integrating automated processes to increase productivity. Today, this industry keeps innovating in this field, introducing robots and robotic systems to include filling, inspection, handling and even packaging and warehousing. Companies in this sector utilizing robotics are, Coca-Cola FEMSA, Sociedad Cooperativa PASCUAL, Pepsico Alimentos de Mexico, Grupo Bimbo, and InBev Anheuser-Busch.

Aerospace sector. Mexico continues to gain market share in the global aerospace industry as its supply chain grows larger and increases in complexity. By the end of 2013, the Mexican aerospace industry numbered 290 companies and the expectation is that it will double by 2020 with investments predominantly from U.S., followed by Mexico itself and European companies. The major players at this moment are Bombardier, Cessna, Beechcraft, Bell Helicopters, MD Helicopters, Eurocopter, Embraer, Gulfstream and Fokker. Robot suppliers are encouraged to seek opportunities among cluster members in Baja California, Chihuahua, Nuevo Leon, Sonora and Queretaro.

Metalworking sector. Tier one and tier two companies in the metalworking sector are successful by providing multiple metal products and a mix of low and large volumes to their OEM clients. Some of these are considering adding robotic systems to increase throughput and reduce set up times. The metalworking industry is primarily located in northeast Mexico, Mexico City and recently, the states of Aguascalientes, Queretaro and San Luis Potosi. Some very important companies are established at Chihuahua, Coahuila and Sonora. Monterrey is a good market for robotic applications in the metalworking sector.

Market Data

In 2004, Mexico was Latin America's second largest buyer of industrial robots after the U. S. and Canada. By 2008, sales had risen 5.3% and suppliers were forecasting a 10% growth by 2018. Per table 2 below, with data supplied from the Secretariat of Economy, on average, 4,200 units are imported into Mexico.

Japanese robots are currently the most preferred, followed by German and U. S. robots. Although in 2013, \$40 million worth of U. S. made robots were imported by Mexican companies, an amount higher than Japanese robots import record in 2012. The difference in quantities imported, reflect the difference in sophistication and size of U. S. robots imported in 2013 (See table 2).

Best Prospects

Companies offering integrated robotic solutions and not only robots are preferred by Mexican buyers. In addition, companies should be able to provide after sales service and warranty. Technical support is of utmost importance and 24/7 availability is a must to be considered as supplier to most medium size and large manufacturers. Robot dealers are also expected to provide software and technical training along with the purchase of the equipment. Parts availability near the manufacturer locations is preferred. Since robots are utilized in intensive processes, downtime hours are typically very expensive and companies always try to avoid them. Even when exporting robots from the U. S., dealers must procure to provide all these customer preferences.

IMPORTS	USD	Volume	USD	Volume	USD	Volume	USD	Volume
IN	2014	2014	2013	2013	2012	2012	2011	2011
MEXICO	JAN-MAY	JAN-MAY	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
Japan	13,288,822	368	35,748,684	3,791	46,835,988	3,146	28,996,687	1,166
Germany	5,827,122	108	14,951,922	182	6,892,449	161	26,102,230	270
United States	4,054,818	513	40,797,670	634	16,690,213	407	21,097,824	638
China	1,949,243	85	4,731,814	185	5,549,817	150	3,225,444	441
South Korea	1,490,374	35	3,230,822	81	1,210,922	49	4,000,852	142
Switzerland	1,181,875	25	1,382,593	33	3,220,636	92	3,047,399	67
France	830,286	23	7,484,679	76	2,629,300	72	3,276,995	64
Italy	751,538	16	2,112,840	54	2,929,092	12	2,493,934	19
Canada	637,149	13	1,469,094	61	591,410	16	1,332,212	25
Netherlands	549,968	24	258,999	10	37,309	6	105,092	17
Total	31,973,098	1,267	119,744,101	5,359	94,018,200	4,339	98,459,995	3,062

Table 2
Mexico Imports by
country (Secretariat
of Economy, 2014)

Key Suppliers

The industrial robot marketplace in Mexico is open to a large variety of international brands such as ABB, Fanuc, Motoman, Epson, Siemens, Mitsubishi, Schunk, TekRob GmbH, THK, Fisnar and others. All of these have representation, sales, and service office in at least, one city of Mexico. In general, all robots are imported into Mexico by integrators or, in few instances, directly by the end users. OEMs have a marked preference for the first three brands mentioned above.

Prospective Buyers

Most of the industrial robot dealers in Mexico sell predominantly to manufacturing technology integrators with abilities to design customized systems to the general industry. There are cases where dealers themselves provide design, integration and turn key projects. A large number of integrators exist these days in Mexico and their number is growing at the same pace that demand grows.

OEM companies currently using industrial robots are: GM, Honda, VW, and Nissan. In Monterrey Alcoa, Lego, Nematik are just a few using large quantities of robots in their operations. The most common industrial applications of robots include material handling, arc welding, spot welding, machining, painting, packaging, plasma cutting and material handling. Other companies will use robots for dispensing applications, palletizing, assembly, lifting and others.

Market Entry

U. S. based industrial robot manufacturers seeking to enter the Mexican market will find a very dynamic and competitive environment. A conservative approach to entering Mexico is through integrators or specialized distributors of robots and robotic components. The large numbers of integrators in Mexico are listed on the dealer's site or in industrial directories. Although this industry is not new, there are very few important associations where integrators can be found. Typically, non-members do not have access to member information. U. S. companies selling robot applications from the U. S. may at some point need to bring their technical staff for installation and commissioning of their designs. In such case, they should be alerted that they are tax liable for

salaries paid or payments received in Mexican territory. The staff must declare their intentions to perform technical work in order to receive the proper immigration documents that are requested by most OEMs. In addition, all staff personnel must be covered with the proper insurance.

Market Issues & Obstacles

Industrial Robots of the type described by HTS code 84795001 INDUSTRIAL ROBOTS FOR MULTIPLE USES are exempt of import duties in Mexico but the buyer is liable for a 16% value add tax. When this merchandise is imported by sea to the customs office in Ensenada, or by land to the customs office in Tijuana, Tecate or Mexicali, the exporters may opt for internal transit import to La Paz, Santa Rosalia or San Jose del Cabo.

Trade Events

COM Rob 2014, XV! Congreso Mexicano de Robotica, Mazatlan, Mexico November 6-8, 2014.

TECMA 2015, Expo Bancomer Santa Fe, Mexico City. March 3-5, 2015. www.tecma.org.mx/

FABTECH MEXICO, Cintermex, Monterrey, Mexico. May 5-7, 2015 www.fabtechmexico.com

Resources & Contacts

Asociacion Mexicana de Robotica, A. C.
Robotics Industries Association (RIA)
International Federation of Robotics (IFR)

<http://amrob.uaslp.mx>
www.robotics.org
www.ifr.org

For More Information:

The U.S. Commercial Service in Monterrey can be contacted via e-mail at: Mario.Vidana@trade.gov; Phone: +52 81 8047 3118; or visit our website: www.export.gov/mexico

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